CLAIMS

1. A method for sealing a heat sealable material comprising:

dispensing a desired length of the heat sealable material;

automatically selecting a heating time based on one or more sealing parameters selected from the group of a minimum sealing temperature, a minimum heating time, a maximum sealing temperature, and a maximum heating time; and

applying heat to a portion of the heat sealable material according to a sealing routine that utilizes the automatically selected heating time.

2. The method of claim 1, further comprising determining values of the sealing parameters based on a thickness of the heat sealable material.

3. The method of claim 1, further comprising determining values for the minimum heating time and maximum heating time parameters based on whether a first sealing operation of a batch is being performed.

4. The method of claim 1, further comprising comparing the automatically selected heating time to a minimum sealing time and a maximum sealing time determined by a thickness of the heat sealable material.

5. The method of claim 1, wherein the sealing routine comprises a preheating procedure including:

preheating a device for applying heat to a portion of the heat sealable material for a first time period; and

allowing the device to cool for a second time period.

6. The method of claim 5, wherein the first time period is determined from an initial temperature of the device and one or more of the sealing parameters.

7. The method of claim 1, wherein the sealing routine comprises:

applying a heating device to the heat sealable material;

applying power to the heating device for the automatically selected heating time;

removing power from the heating device and allowing the heating device to remain applied to the heat sealable material for a third time period; and

removing the heating device from the heat sealable material.

8. A heat sealing machine comprising:

a mechanism for dispensing a desired length of a heat sealable material;

a processor operable to automatically select a heating time based on one or more sealing parameters selected from the group of a minimum sealing

temperature, a minimum heating time, a maximum sealing temperature, and a maximum heating time; and

a heating device for applying heat to a portion of the heat sealable material according to a processor controlled sealing routine that utilizes the automatically selected heating time.

9. The machine of claim 8, wherein the processor is operable to determine values for the minimum heating time and maximum heating time parameters based on whether a first sealing operation of a batch is being performed.

10. The machine of claim 8, further comprising a control for selecting a thickness of the heat sealable material, wherein the processor is operable to determine values of the sealing parameters based on the thickness of the heat sealable material.

11. The machine of claim 10, wherein the processor is operable to compare the automatically selected heating time to a minimum sealing time and a maximum sealing time determined by the thickness of the heat sealable material.

12. The machine of claim 8, wherein during the processor controlled sealing routine, the processor is operable to preheat the heating device for a fourth time period, and is operable to allow the heating device to cool for a fifth time period.

13. The machine of claim 12, wherein the fourth time period is determined from an initial temperature of the heating device and one or more of the sealing parameters.

14. The machine of claim 8, further comprising a mechanism for applying and removing the heating device from the heat sealable material, wherein during the processor controlled sealing routine, the processor is operable to:

cause the mechanism to apply the heating device to the heat sealable material;

apply power to the heating device for the automatically selected heating time;

remove power from the heating device while allowing the heating device to remain applied to the heat sealable material for a third time period; and

cause the mechanism to remove the heating device from the heat sealable material.

15. A computer program product comprising:

a computer useable medium having computer readable code means embodied therein for causing a computer to execute a method for sealing a heat sealable material, the computer readable code means in the computer program product including:

computer readable program code means for causing a computer to dispense a desired length of the heat sealable material;

computer readable program code means for causing a computer to automatically select a heating time based on one or more sealing parameters selected from the group of a minimum

sealing temperature, a minimum heating time, a maximum sealing temperature, and a maximum heating time; and

computer readable program code means for causing a computer to apply heat to a portion of the heat sealable material according to a sealing routine that utilizes the automatically selected heating time.

16. The computer program product of claim 15, further comprising computer readable program code means for causing a computer to determine values of the sealing parameters based on a thickness of the heat sealable material.

17. The computer program product of claim 15, further comprising computer readable program code means for causing a computer to determine values for the minimum heating time and maximum heating time parameters based on whether a first sealing operation of a batch is being performed.

18. The computer program product of claim 15, further comprising computer readable program code means for causing a computer to compare the automatically selected heating time to a minimum sealing time and a maximum sealing time determined by a thickness of the heat sealable material.

19. The computer program product of claim 15, wherein the sealing routine comprises a preheating procedure including:

computer readable program code means for causing a computer to preheat a device for applying heat to a portion of the heat sealable material for a first time period; and

computer readable program code means for causing a computer to allow the device to cool for a second time period.

20. The computer program product of claim 19, wherein the first time period is determined from an initial temperature of the device and one or more of the sealing parameters.

21. The computer program product of claim 15, wherein the sealing routine comprises:

computer readable program code means for causing a computer to apply a heating device to the heat sealable material;

computer readable program code means for causing a computer to apply power to the heating device for the automatically selected heating time;

computer readable program code means for causing a computer to remove power from the heating device and allowing the heating device to remain applied to the heat sealable material for a third time period; and

computer readable program code means for causing a computer to remove the heating device from the heat sealable material.

22. A bag dispenser comprising:

a sealing device

a controller programmed to control the sealing device; and

a program for use by the controller for automatically selecting a sealing time for the sealing device, wherein the sealing time is selected according to one or more of a bag count or a parameter of the sealing device.

23. The bag dispenser of claim 22, wherein a bag count of 0 results in a first sealing time.

24. The bag dispenser of claim 22, wherein a bag count of other than 0 results in a second sealing time.

25. The bag dispenser of claim 22, wherein the program is operable to compare the automatically selected sealing time to a minimum sealing time and a maximum sealing time determined by a thickness of the dispensed bag.

26. The bag dispenser of claim 22, wherein the parameter of the sealing device includes one or more parameters selected from the group of a minimum sealing temperature, a minimum heating time, a maximum sealing temperature, and a maximum heating time.

27. The bag dispenser of claim 26, wherein values for the minimum heating time and maximum heating time parameters are based on whether a first sealing operation of a batch is being performed.

28. A bag dispenser comprising:

a bag selector for selecting one of a bag width or a bag thickness for effecting an automatic bag selection; and

a controller responsive to an output of the selector for programmatically determining a seal time for the automatically selected bags.